



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/595,350

04/12/2006

Michael Beri

CMB0101PUSA

8073

22045

7590

02/17/2009

BROOKS KUSHMAN P.C.
1000 TOWN CENTER
TWENTY-SECOND FLOOR
SOUTHFIELD, MI 48075

EXAMINER

BURCH, MELODY M

ART UNIT

PAPER NUMBER

3657

MAIL DATE

DELIVERY MODE

02/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,350	Applicant(s) BERI, MICHAEL	
	Examiner Melody M. Burch	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 17-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 27-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-40 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/10/08, 12/4/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 12/4/08 is acknowledged.
2. Claims 17-26 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/4/08.

Specification

3. The disclosure is objected to because of the following informalities: the first sentence of the specification needs to be updated to include the updated status of the parent application.

Appropriate correction is required.

Claim Objections

4. Claims 1-6 and 32 are objected to because of the following informalities: the term "theat" should be changed to --the at-- in the last line of claim 1. Appropriate correction is required. The remaining claims are objected to due to their dependency from claim 1.
5. Claim 32 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

Art Unit: 3657

dependent form, or rewrite the claim(s) in independent form. Claim 32 recites the same limitation as claim 2.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 6-16 and 27-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claims 6 and 35. The phrase "a friction material brake lining" first recited in lines 1-2 of claim 6 is indefinite. It is unclear to the Examiner whether the brake lining recited in claim 6 is intended to be the same or different from the brake lining claimed in the independent claim from which it depends. A similar issue exists with claim 35.

Re: claim 7. Starting in line 5 the phrase "at least one key provided on the backing plate that receives the at least one key provided on the backing plate" is indefinite. It is unclear to the Examiner how the at least one key can receive the at least one key.

Re: claim 7. The phrase "a frictional brake lining" in line 4 from the bottom is indefinite. It is unclear to the Examiner whether the frictional brake lining in line 4 from the bottom of claim 7 is intended to be the same or different from the brake lining recited earlier in line 4 of claim 7. A similar issue exists in claim 13.

Re: claim 27. The phrase "cylindrical brake shoe" in line 2 of claim 27 is indefinite. It is unclear to the Examiner whether Applicant intends for the brake shoe to

Art Unit: 3657

be in the form of a cylinder or in the form of an arc-shaped member. Examiner has interpreted the claim as intending to refer to the arc-shaped member as being cylindrical. Clarification is required.

Re: claims 30 and 31. The phrase “the fastener” in lines 2-3 from the bottom is indefinite. It is unclear to the Examiner as to which fastener Applicant intends to refer to since a plurality of fasteners was previously recited. A similar issue exists with claim 31.

The remaining claims are indefinite due to their dependency from one of claims 7, 13, 27, and 31.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 7, 10-13, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 1772639 to Slade.

Re: claims 7 and 10-12. Slade shows in figures 1 and 2 a brake shoe assembly comprising: a brake shoe 9 having an outer radial surface; a brake plate 1, 2 secured to the outer radial surface of the brake shoe, the brake plate having a backing plate 2 that supports a brake lining 1; at least one slot through which element 11 passes formed on the brake shoe, at least one key 11 provided on the backing plate that receives the at least one key provided on the backing plate for resisting radial movement of the brake plate relative to the outer radial surface of the brake shoe as best understood; and a

Art Unit: 3657

plurality of fasteners or remaining elements 11 for securing the brake plate to the brake shoe; and a frictional brake lining 1 molded on or formed to the contours of the brake plate by a pressing operation as disclosed, the brake lining having cut out portions at the left and right opposing ends exposing four corners of the brake plate, wherein each exposed corner of the brake plate has a hole¹⁴ for (capable of) receiving one of the fasteners for fastening the brake plate to the brake shoe.

Re: claims 13 and 16. Slade shows in figures 1 and 2 a brake shoe assembly comprising: a brake shoe 9 having an outer radial surface; a brake plate 1, 2 secured to the outer radial surface of the brake shoe, the brake plate having a backing plate 2 that supports a brake lining 1; the backing plate 2 having at least one slot 12, at least one key 11 provided on the brake shoe 9 that is received by the at least one slot for resisting radial movement of the brake plate relative to the outer radial surface of the brake shoe; a plurality of fasteners or remaining elements 11 for securing the brake plate to the brake shoe; and a frictional brake lining 1 molded on or formed to the contours of the brake plate by a pressing operation as disclosed, the brake lining having cut out portions at the left and right opposing ends exposing four corners of the brake plate, wherein each exposed corner of the brake plate has a hole¹⁴ for (capable of) receiving one of the fasteners for fastening the brake plate to the brake shoe. With respect to claims 10 and 16, Examiner notes that the term "integral" is sufficiently broad to embrace constructions united by such means as fastening. See *In re Hotte*, 177 USPQ 326 (CCPA).

Art Unit: 3657

10. Claims 1, 2, 6, 30 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 2879866 to Newell.

Re: claims 1, 2, 6 and 32. Newell shows in figures 1 and 6 a brake shoe assembly comprising: a brake shoe 23 having an outer radial surface; a brake plate 1, 21 secured to the outer radial surface of the brake shoe, the brake plate having a backing plate 1 that supports a brake lining 21; at least one slot 9 best shown in figure 3 formed on the backing plate and at least one key or one of elements 17 provided on the brake shoe as shown in figure 6 for resisting radial movement of the brake plate relative to the outer radial surface of the brake shoe; and a plurality of fasteners or remaining elements 17 for securing the brake element to the brake shoe, the plurality of fasteners including a preassembled fastener preassembled as disclosed in col. 1 lines 36-38 to the brake plate and extending away from the brake plate toward the brake shoe; wherein the brake shoe having holes 26 for receiving the plurality of fasteners, the preassembled fastener being inserted into a corresponding one of the holes to facilitate alignment of the at least one key within the at least one slot.

Re: claim 30. Newell shows in figure 6 a brake shoe assembly comprising: a brake shoe 23 having an outer radial surface; a brake plate 1, 21 secured to the outer radial surface of the brake shoe, the brake plate having a backing plate 1 that supports a brake lining 21; a tang or one of elements 17 provided on the backing plate and at least one receptacle 26 provided on the brake shoe that receives the tang for resisting radial movement of the brake plate relative to the outer radial surface of the brake shoe; a plurality of fasteners or some of the remaining elements 17 for securing the brake

Art Unit: 3657

plate to the brake shoe; and a fastener or one of the remaining elements 17 preassembled to the brake plate and extending away from the brake plate toward the brake shoe, the brake shoe having a hole or corresponding element 26 for receiving the fastener, the fastener being inserted into the hole to facilitate alignment of the tang within the receptacle.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newell in view of US Patent 3996717 to Sallenave.

Newell describes the invention substantially as set forth above including the limitation of a plurality of fasteners, but is silent with regards to the plurality of fasteners being threaded clinch stud bolts.

Sallenave teaches in figure 1 the use of a plurality of fasteners used in connecting components being in the form of threaded clinch stud bolts 4.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the plurality of fasteners of Newell to have

Art Unit: 3657

included threaded clinch stud bolts, as taught by Sallenave, in order to provide a functionally equivalent means of securely connecting two components.

13. Claims 4 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newell in view of US Patent 6300847 to Gallagher et al.

Newell is silent with regards to the preassembled fastener being longer than the at least one key to facilitate aligning the at least one key relative to the at least one slot.

Gallagher et al. teach in figure 12B the use of at least one key 260 and at least one fastener 261 that is longer than the key.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the preassembled fastener of Newell to have been longer than the at least one key, in view of the teachings of Gallagher et al., in order to provide an alignment means as taught by Gallagher et al.

14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newell in view of US Patent 6125567 to Roy.

Newell is silent with regards to the preassembled fastener being secured to the brake shoe by a flaring tool.

Roy teaches in col. 5 lines 49-52 the use of a fastener being secured to an element by a flaring tool.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the securing of the preassembled fastener to the brake shoe of Newell to have taken place by a flaring tool, in view of the teachings of

Art Unit: 3657

Roy, in order to provide a means of more securely attaching one component to another by increasing the frictional contact between the two components.

15. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slade in view of US Patent 2053939 to Barrows.

Slade describes the invention substantially as set forth above, but is silent with regards to the slot being axially elongated and the key being correspondingly elongated.

Barrows teaches in figure 1 the use of a slot 12 being axially elongated to receive a correspondingly elongated key 13.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the slot and key of Slade to have been axially elongated, as taught by Barrows, in order to provide a connection with greater surface area to enable greater frictional resistance to help keep the connected components together.

16. Claims 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slade in view of US Patent 2053939 to Barrows as applied to claims 8 or 14 above, and further in view of Newell.

Slade, as modified, describes the invention as set forth above, including the limitation of keys on the backing plate, but is silent with regards to the keys being formed on the backing plate.

Newell teaches the use of keys 2 being formed on the backing plate 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the keys of Slade, as modified, to have been

Art Unit: 3657

formed on the backing plate, as taught by Newell, in order to reduce the number of parts which can save a step in assembly and sometimes result in a cost savings.

17. Claims 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2879866 to Newell.

Re: claim 31 and 35. Newell shows in figure 6 a brake shoe assembly comprising: a brake shoe 23 having an outer radial surface; a brake plate 1, 21 secured to the outer radial surface of the brake shoe, the brake plate having a backing plate 1 that supports a brake lining 21; at least one key hole 26 formed on the backing plate and at least one key 17 provided on the backing plate for resisting radial movement of the brake plate relative to the outer radial surface of the brake shoe; a plurality of fasteners or some of the remaining elements 17 for securing the brake plate to the brake shoe; and a fastener or one of the remaining elements 17 preassembled to the brake plate and extending away from the brake plate toward the brake shoe, the brake shoe having a hole or corresponding element 26 for receiving the fastener, the fastener being inserted into the hole to facilitate alignment of the tang within the receptacle.

Newell is silent with regards to the key and brake shoe key hole being cylindrical. It would have been obvious to have modified the shape of the key and brake shoe key hole to have been cylindrical in light of the teachings in *In re Dailey*. In *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant. Applicant has provided no particularly criticality for the cylindrical configuration.

Art Unit: 3657

18. Claims 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2879866 to Newell in view of Slade.

Re: claim 27. Newell shows in figures 1, 2, and 6 a brake shoe assembly for a vehicle comprising: a cylindrical brake shoe 23 having an outer radial surface, a brake plate 1 secured to the outer radial surface of the brake shoe, a frictional brake lining 21 molded over the brake plate and covering a preassembled fastener 17, a key or one of the remaining elements 17 and a slot 26 for receiving the key for resisting radial movement of the brake plate relative to the outer radial surface, and wherein the preassembled fastener is secured to and extends away from the brake plate toward the brake shoe, the brake shoe having a hole one of the remaining elements 26 for receiving the preassembled fastener.

With regards to the limitation of the brake shoe being cylindrical, Examiner, as best understood, has interpreted cylindrical to mean relating to a cylinder which broadly includes an arc shape.

With regards to the limitation of the preassembled fastener being inserted into the hole prior to mating the slot with the key to facilitate alignment of the key with the slot, Examiner notes that the patentability of a product does not depend on its method of production. See MPEP 2113.

Newell is silent with regards to the brake shoe assembly being a drum brake shoe assembly.

Slade teaches on pg. 1 lines 20-21 the use of a brake shoe assembly being in the form of a drum brake shoe assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the brake shoe assembly of Newell to have been a drum brake shoe assembly, as taught by Slade, in order to provide a functionally equivalent means of decelerating a wheel for safety purposes.

Re: claim 29. Newell, as modified, is silent with regards to the key and slot being circumferential (related to the perimeter of a circle). It would have been obvious to have modified the shape of the key and slot to have been cylindrical in light of the teachings in *In re Dailey*. In *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant.

19. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2879866 to Newell in view of Slade as applied to claim 27 and further in view of Barrows.

Newell, as modified, describes the invention substantially as set forth above, but is silent with regards to the slot being elongated and the key being correspondingly elongated.

Barrows teaches in figure 1 the use of a slot 12 being axially elongated to receive a correspondingly elongated key 13.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the slot and key of Newell, as modified, to have been elongated, as taught by Barrows, in order to provide a connection with greater

Art Unit: 3657

surface area to enable greater frictional resistance to help keep the connected components together.

20. Claims 36, 37, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4453621 to Warwick et al. in view of Newell.

Re: claims 36 and 40. Warwick et al. show in figure 2 a brake shoe assembly comprising; a brake shoe 16 having an outer surface that includes a plurality of flats 20; a plurality of brake elements 18 having a flat back each of which are assembled to one of the flats, each of the brake elements having a layer of friction material applied to the brake shoe, the layer of friction material having a partially cylindrical outer surface that is adapted to engage a brake drum; and a plurality of fasteners or protruding portions shown in the area of 36 securing the brake elements to the brake shoe.

Warwick et al. are silent with regards to the brake elements having a backing plate with the friction material applied to the opposite side of the backing plate relative to the brake shoe.

Newell teaches in figure 6 a brake element having a backing plate 1 abutting with a friction material 21 applied to the opposite side of the backing plate relative to a brake shoe 23.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the brake elements of Warwick et al. to have included backing plates, as taught by Newell, in order to provide added support and connection capabilities for the lining with respect to the brake shoe.

Re: claims 37 and 39. Warwick et al., as modified, teach the limitation wherein one of the brake shoe and backing plates has a key and the other of the brake shoe and backing plates has a key way. In this case it is the backing plate that has the key or the protruding portion extending into a key way of the brake shoe. Examiner notes that the key is one of the elements shown in the area of element number 36 since the Warwick et al. reference describes that there may be a plurality of connectors shown in the area of element number 36 therefore allowing for both the key and the plurality of fasteners. See figure 2 of Warwick et al.

21. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4453621 to Warwick et al. in view of Newell as applied to claim 37 above, and further in view of US Patent 5119909 to Shim.

Warwick et al., as modified, are silent with regards to the key being formed on the brake shoe and the key way being formed in the brake plate.

Shim teaches in figure 5 the use of a key 36 being formed on a brake shoe and a key way shown between elements 48 being formed on a brake element 46.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the position of the keys and keyways in Warwick et al., as modified, such that the keys were formed on the brake shoe, as taught by Shim, in order to provide a functionally equivalent means of connecting two components.

In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) (Claims to a hydraulic power press which read on the prior art except with regard to the position of the starting

Art Unit: 3657

switch were held unpatentable because shifting the position of the starting switch would not have modified the operation of the device.)

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 1934448 to Roth teaches in figures 1 and 2 the use of a brake shoe assembly having a brake shoe 10,20 and a brake element with the assembly having preassembled fasteners 22 or the projections between elements 18.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/595,350
Art Unit: 3657

Page 16

mmb
February 12, 2009

/Melody M. Burch/
Primary Examiner, Art Unit 3657